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REMARKS

A review of the claims indicates that:

A) Claims 1, 2 and 4—22 remain in their original form.

B) Claims 1, 2 and 4—22 are currently in a state of non-final rejection.

In view of the following remarks, Applicant respectfully requests reconsideration of the rejected claims.

Section 102 (e) Rejections

Claims 1—9, 12—13 and 15—21 were rejected under §102(e) as being anticipated by U.S. Patent No. 6,404,511, hereinafter “Lin.”

Prior to addressing these rejections directly, the Applicant discusses aspects of the Lin reference in a section entitled “The Lin Reference.”

Additionally, it is clear that a point of misunderstanding exists with respect to the characteristics of a “least dynamic printer,” as recited by claim 1 and others. Accordingly, the Applicant has included a brief section entitled “The Concept of a Least-Dynamic Printer,” which discusses the concept of printer dynamics and “a least dynamic printer.”

The Lin Reference

The Lin reference discloses a way to calibrate a network copy system (see Lin, at Title). Lin provides a technique to minimize variations in output images generated by different output devices (col. 9, lines 33—35). Lin notes that two printers of the same model can produce different output (col. 9, lines 15—18 and 27—30). In particular, Lin teaches that a reference

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1 device may be selected, while the other devices are considered non-
2 reference devices (col. 9, lines 37—43). Four 1-D look-up tables are created
3 for each non-reference printer, so that the output of these printers is the same
4 or very similar to the reference printer, i.e. the non-reference printers are
5 calibrated to the reference printer (Abstract and other locations).

6 The Concept of a Least Dynamic Printer

7 The Applicant believes that a brief discussion of printer dynamics and
8 the concept of “a least dynamic printer” would be helpful.

9 Referring briefly to the Applicant's Fig. 4 and page 9 of the
10 specification, a graphical representation 400 of a CIELab color space is
11 seen. A closed loop 402 represents a three-dimensional form enclosing the
12 color gamut required for ideal printing of a color target. A second curve 404
13 represents the gamut printable by a particular printer. Note that the curve
14 404 is ‘outside’ of the loop 402; therefore, the printer having gamut 404 is
15 fully able to print the target associated with the gamut 402. A third curve
16 406 is ‘inside’ curve 402. Accordingly, a printer having the gamut 406 is
17 not fully able to print the target associated with the gamut 402. By
18 comparison, the printer associated with the gamut 406 is less dynamic than
19 the printer associated with the curve 404.

20 In another example, Fig. 5 and page 10—11 of the spec shows curves
21 506, 508 and 510 associated with three printers. Note that curve 506 is
22 ‘lighter’ for all input values, than curves 508 and 510. The ‘lighter’ print
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1 means that the printer is less able to put the required amount of ink on the
2 paper, and therefore has less dynamic range. Therefore, curve 506 is
3 associated with the printer having the least dynamic range within the group
4 of three printers. (See page 10, lines 19—25.)

5 Thus, a less dynamic printer has a 'less dynamic' range, and is
6 therefore less able to respond to some print data in the correct manner, as
7 compared to a more dynamic printer. Thus, within a group of printers, a
8 least dynamic printer is least able to print certain aspects of a print target or
9 other print output. Note that, within different parts of a print gamut,
10 different printers may be 'least dynamic.' Additionally note that, in
11 different circumstances, color look-up tables could be used by non-least
12 dynamic printers, to result in the same printout as the least dynamic printer.

14 Note the discussion of this section is not meant to interpret or limit the
15 claims. Instead, this section is meant to provide general knowledge about
16 printer dynamics.

18 **Traversal of the §102 Rejections**

19 Claims 1—9, 12—13 and 15—21 were rejected under §102(e) as being
20 anticipated by U.S. Patent No. 6,404,511, hereinafter "Lin." In response, the
21 Applicant respectfully traverses the rejection.

23 **Claim 1** recites calculating look-up tables for a cluster of printers
24 comprising:
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- determining a least dynamic printer in the cluster; and
- calculating corrected input values required to normalize an output of at least one non-least dynamic printer in the cluster.

The Applicant's claim recites a least dynamic printer, and additionally of normalizing output of a non-least dynamic printers to the least dynamic printer.

In contrast, the Lin reference does not teach "determining a least dynamic printer in the cluster," as recited by claim 1. The Lin reference teaches assembling a group of printers and simply selecting one of them to be the reference printer (col. 9, lines 33-43). Thus, Lin does not teach determining a *least dynamic* printer in the cluster, or a reference printer that is least dynamic.

The Patent Office suggests that the reference printer is analogous to the "least dynamic printer" recited by the Applicant's claim. The Applicant respectfully disagrees.

In the Lin patent, the reference printer is not disclosed to be least dynamic or least responsive. Lin simply selects one of the printers to be the reference printer (col. 9, lines 40-43). In contrast, the Applicant recites "a least dynamic printer" as a target to which the non-least dynamic printers are normalized.

Therefore, Lin does not teach determining a least dynamic printer or even the existence of a least dynamic printer. It is a significant aspect of the Applicant's claim that the non-least dynamic printer(s) are normalized to the least dynamic printer. Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

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1 **Claim 2** depends from Claim 1 and is allowable due to its dependence from
2 an allowable base claim. This claim is also allowable for its own recited features
3 that, in combination with those recited in Claim 1, are neither disclosed nor
4 suggested in references of record, either singly or in combination with one
5 another.

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7 **Claim 3** was previously cancelled.

8 **Claim 4** recites:

- 9 • wherein a least dynamic printer is determined for each primary
10 color.

11 In general, the Lin reference does not determine a least dynamic printer. In
12 particular, Lin does not determine a least dynamic printer for each primary color.

13 The Patent Office suggests that col. 10, lines 44—60 disclose the recited
14 subject matter. The Applicant respectfully traverses the rejection.

15 Column 10 discloses that transfer functions for each primary color are
16 calculated, and that the non-reference printers may be calibrated to the reference
17 printer. However, Lin does not disclose determining a least dynamic printer
18 generally, and does not disclose determining a least dynamic printer for each
19 primary color.
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21 Therefore, the Lin reference fails to disclose elements recited in the
22 Applicant's claim. Accordingly, the section 102 rejection is improper, and the
23 Applicant respectfully requests that the rejection be removed.
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1 **Claims 5 and 6** depend from Claim 1 and are allowable due to their
2 dependence from an allowable base claim. These claims are also allowable for
3 their own recited features that, in combination with those recited in Claim 1, are
4 neither disclosed nor suggested in references of record, either singly or in
5 combination with one another.

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7 **Claim 7** recites a method for calibrating a cluster of printers comprising:

- 8 • printing a calibration target with each printer in the cluster;
- 9 • measuring each calibration target to produce measurement data;
- 10 • calculating transfer functions for each printer in the cluster;
- 11 • determining a least dynamic printer in the cluster;
- 12 • calculating corrected input values required to normalize output of
13 non-least dynamic printers in the cluster;
- 14 • organizing the corrected input values into look-up tables; and
- 15 • sending the look-up tables to each printer within the cluster.

16 Claim 7 recites “determining a least dynamic printer,” which is not
17 disclosed by the Lin reference. In fact, Lin is generally silent about how the
18 reference printer is selected.

19 The Patent Office suggests that the reference printer 30A is analogous to
20 the least dynamic printer. The Applicant respectfully disagrees.

21 The reference printer disclosed by Lin is not a “least dynamic printer.”
22 While the Applicant’s least dynamic printer is a reference printer, the reference
23 printer of Lin is not a least dynamic reference printer. In fact, Lin does not discuss
24 the concept of a “least dynamic printer.” Moreover, Lin does not disclose any
25 selection process by which the “least dynamic” printer within the cluster is

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1 determined. Lin simply selects a printer (the reference printer, column 9, line 41),
2 and then calibrates the non-reference printers to that printer (Abstract, first two
3 lines).

4 Therefore, the Lin reference fails to disclose elements recited in the
5 Applicant's claim. Accordingly, the section 102 rejection is improper, and the
6 Applicant respectfully requests that the rejection be removed.

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8 **Claims 8, 9 and 12** depend from Claim 1 and are allowable due to their
9 dependence from an allowable base claim. These claims are also allowable for
10 their own recited features that, in combination with those recited in Claim 1, are
11 neither disclosed nor suggested in references of record, either singly or in
12 combination with one another.

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14 **Claim 13** recites calibrating a cluster of printers comprising:

- 15 • printing a calibration target with each printer in the cluster;
- 16 • measuring each calibration target to produce measurement data;
- 17 • calculating transfer functions for each primary color and for each
18 printer in the cluster;
- 19 • determining a least dynamic printer in the cluster with respect to
20 each primary color;
- 21 • calculating corrected input values required to normalize output of
22 non-least dynamic printers in the cluster to the least dynamic printer
23 in each cluster with respect to each primary color;
- 24 • organizing the corrected input values into look-up tables; and
- 25 • sending the look-up tables to each printer within the cluster for
inclusion in a color data flow.

23 Claim 13 recites "determining a least dynamic printer in the cluster with
24 respect to each primary color," which is not disclosed by the Lin reference.
25 Therefore, the rejection of claim 13 is improper for the same reason the rejection

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1 of claim 4 is improper. Accordingly, the argument with respect to claims 1 and 4
2 is incorporated at this location by reference.

3 The Patent Office suggests that columns 9—11 disclose determining a least
4 dynamic printer. However, Lin does not disclose determining a least dynamic
5 printer, generally. More specifically, Lin does not disclose determining a least
6 dynamic printer with respect to each (or any) primary color(s).

7 Therefore, the Lin reference fails to disclose elements recited in the
8 Applicant's claim. Accordingly, the section 102 rejection is improper, and the
9 Applicant respectfully requests that the rejection be removed.
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11
12 **Claim 15 recites a cluster of printers comprising:**

- 13
- at least two printers;
 - a transfer function calculator to derive a transfer function for each
14 printer with respect to at least one color;
 - a least dynamic response selector to determine a least dynamic
15 printer from within the cluster of printers for at least one color;
 - a normalizer for calculation of corrected input values required to
16 normalize more dynamic printers' output with respect to the least
17 dynamic printer; and
 - a look-up table assembler to organize the corrected input values into
18 look-up tables.
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20 Claim 15 recites "a least dynamic response selector to determine a least
21 dynamic printer from within the cluster of printers for at least one color," which is
22 not disclosed by the Lin reference, which does not disclose selecting a least
23 dynamic printer.
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1 The Patent Office suggests that the selection of printer 30A indicates that
2 Lin discloses a least dynamic response selector. However, nothing in Lin suggests
3 or discloses the concept of a least dynamic response. In fact, the cited passage at
4 column 9, lines 40—42 would make it appear the Lin simply picks on of the
5 printers to be the reference (so that the other printers can be normalized to the
6 selected reference printer). Nothing in Lin discloses selecting a reference printer
7 that is a *least dynamic reference printer*.

8 Therefore, the Lin reference fails to disclose elements recited in the
9 Applicant's claim. Accordingly, the section 102 rejection is improper, and the
10 Applicant respectfully requests that the rejection be removed.

11 **Claim 16** depends from Claim 15 and is allowable due to its dependence
12 from an allowable base claim. This claim is also allowable for its own recited
13 features that, in combination with those recited in Claim 1, are neither disclosed
14 nor suggested in references of record, either singly or in combination with one
15 another.

16 **Claims 17—19** were rejected as corresponding to claims 7—12.
17 Accordingly, the Applicant respectfully traverses the rejection, and incorporates
18 by reference the arguments of claims 7—12.

19 **Claims 20—21** were rejected as corresponding to claims 15—16.
20 Accordingly, the Applicant respectfully traverses the rejection, and incorporates
21 by reference the arguments of claims 15—16.

22 **Traversal of the §103 Rejections**
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1 **Claims 10, 11, 14 and 22** stand rejected under 35 U.S.C. §103(a) as being
2 obvious over Lin in view of U.S. Pat. No. 6,172,771 hereinafter "Ikeda." In
3 response, the Applicant respectfully traverses the rejection.

4 The Ikeda reference fails to remedy the failings of Lin. In particular, Ikeda
5 fails to disclose "determining a least dynamic printer in the cluster." Because
6 Ikeda fails to remedy Lin, the rejection of claims 7, 13 and 20, from which claims
7 10, 11, 14 and 22 depend, is improper.

8 Therefore, because claims 10, 11, 14 and 22 depend from claims 7, 13 and
9 20, these claims are allowable due to their dependence from an allowable base
10 claim. These claims are also allowable for their own recited features that, in
11 combination with those recited in their respective base claims, are neither
12 disclosed nor suggested in references of record, either singly or in combination
13 with one another.

14 Therefore, even in combination, the Lin and Ikeda references *fail to*
15 *disclose elements recited in the Applicant's claim.* Accordingly, the section 103
16 rejection is improper, and the Applicant respectfully requests that the rejection be
17 removed.
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Conclusion

The Applicant submits that all of the claims are in condition for allowance and respectfully requests that a Notice of Allowability be issued. If the Office's next anticipated action is not the issuance of a Notice of Allowability, the Applicant respectfully requests that the undersigned attorney be contacted for scheduling an interview.

Respectfully Submitted,

Dated: 9-13-2005By: 

David S. Thompson
Reg. No. 37,954
Attorney for Applicant

LEE & HAYES PLLC
Suite 500
421 W. Riverside Avenue
Spokane, Washington 99201
Telephone: 509-324-9256 x235
Facsimile: (509) 323-8979